

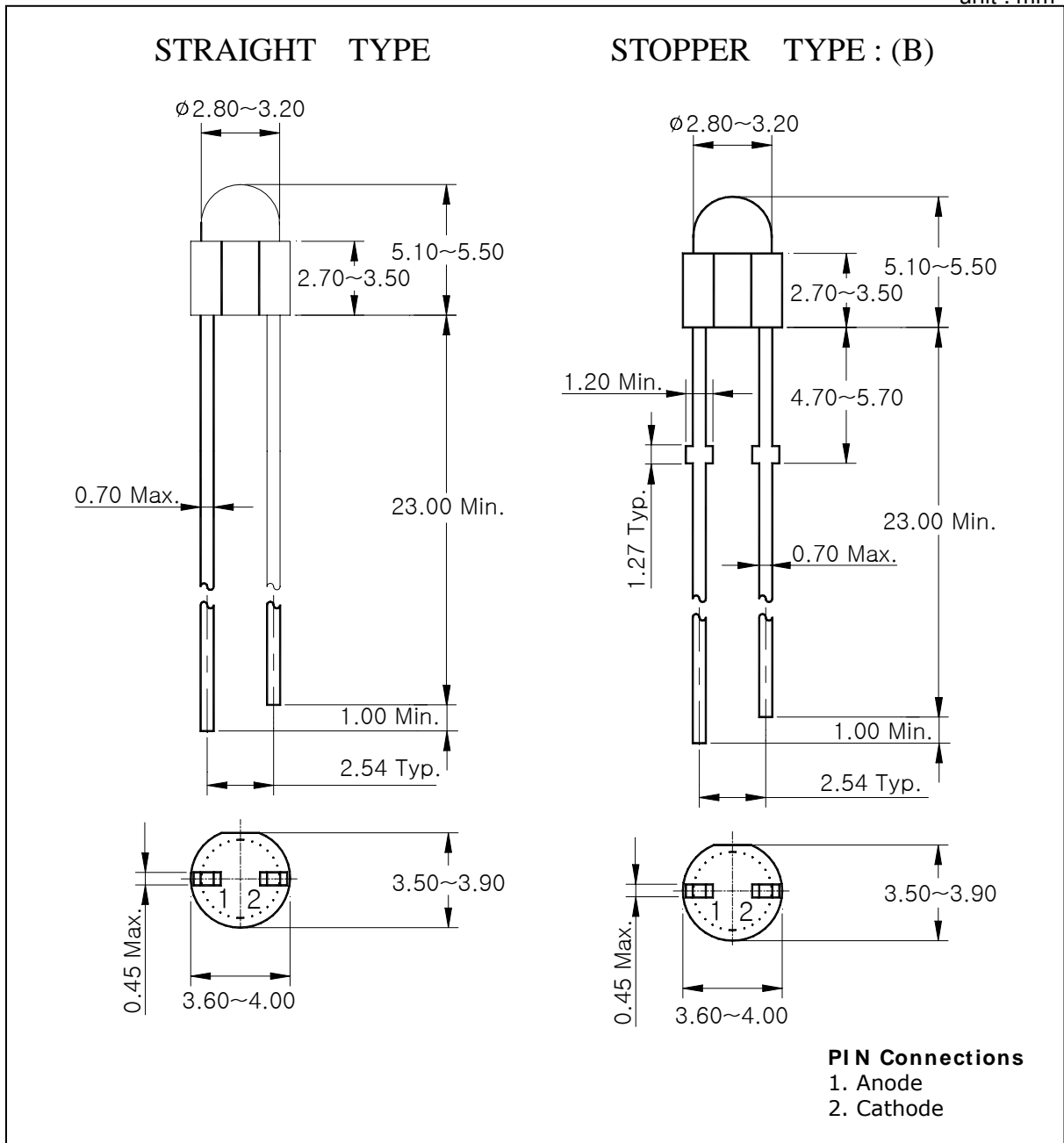
**SY3417 / SY3417(B)**

**1. Features**

- ◆ Yellow colored transparency lens type
- ◆  $\phi 3\text{mm(T-1)}$  all plastic mold type
- ◆ Low power consumption

**2. Outline Dimensions**

unit : mm



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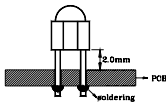
### 3. Absolute Maximum Ratings

(Ta=25°C)

| Characteristic              | Symbol    | Rating               | Unit |
|-----------------------------|-----------|----------------------|------|
| Power dissipation           | $P_D$     | 75                   | mW   |
| Forward current             | $I_F$     | 30                   | mA   |
| *1Peak forward current      | $I_{FP}$  | 50                   | mA   |
| Reverse voltage             | $V_R$     | 4                    | V    |
| Operating temperature range | $T_{opr}$ | -25~85               | °C   |
| Storage temperature range   | $T_{stg}$ | -30~100              | °C   |
| *2Soldering temperature     | $T_{sol}$ | 260°C for 10 seconds |      |

\*1.Duty ratio = 1/16, Pulse width = 0.1ms

\*2.Keep the distance more than 2.0mm from PCB to the bottom of LED package



### 4. Electrical / Optical Characteristics

(Ta=25°C)

| Characteristic       | Symbol          | Test Condition    | Min | Typ      | Max | Unit |
|----------------------|-----------------|-------------------|-----|----------|-----|------|
| Forward voltage      | $V_F$           | $I_F=20\text{mA}$ | -   | 2.1      | 2.5 | V    |
| *3Luminous intensity | $I_V$           | $I_F=20\text{mA}$ | 27  | -        | 155 | mcd  |
| Dominant wavelength  | $\lambda_D$     | $I_F=20\text{mA}$ | 583 | 588      | 592 | nm   |
| Spectrum bandwidth   | $\Delta\lambda$ | $I_F=20\text{mA}$ | -   | 30       | -   | nm   |
| Reverse current      | $I_R$           | $V_R=4\text{V}$   | -   | -        | 10  | uA   |
| *4Half angle         | $\theta_{1/2}$  | $I_F=20\text{mA}$ | -   | $\pm 17$ | -   | deg  |

\*4.  $\theta_{1/2}$  is the off-axis angle where the luminous intensity is 1/2 the peak intensity\*3. Luminous intensity maximum tolerance for each grade classification limit is  $\pm 18\%$ 

\*3. Luminous Intensity Classification

| I       | J       | K        | L         |
|---------|---------|----------|-----------|
| 27 ~ 43 | 43 ~ 68 | 68 ~ 100 | 100 ~ 155 |

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5. Characteristic Diagrams

Fig. 1  $I_F - V_F$

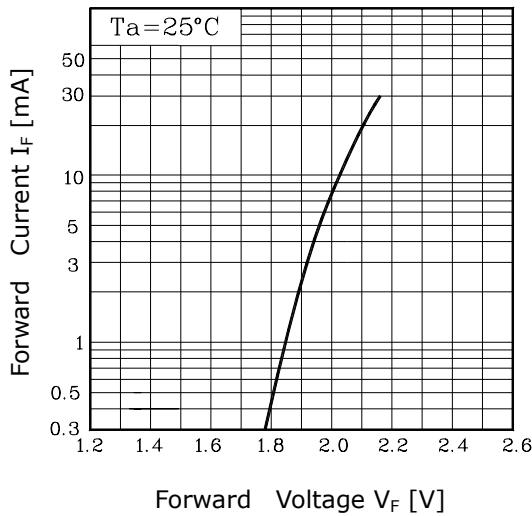


Fig. 2  $I_V - I_F$

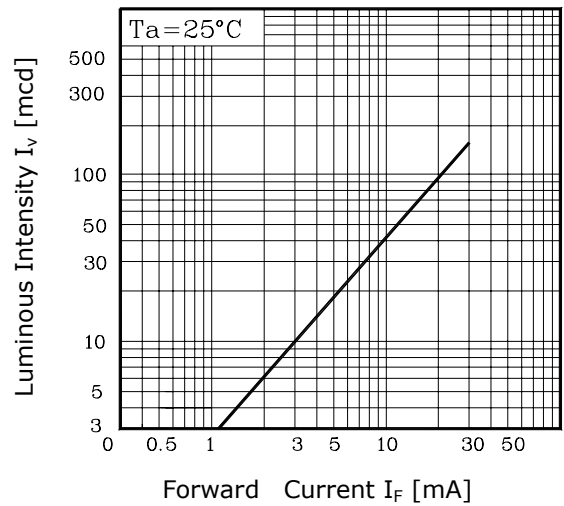


Fig. 3  $I_F - T_a$

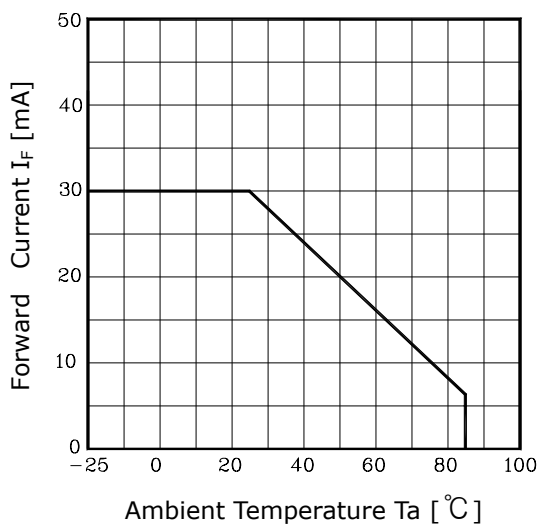


Fig.4 Spectrum Distribution

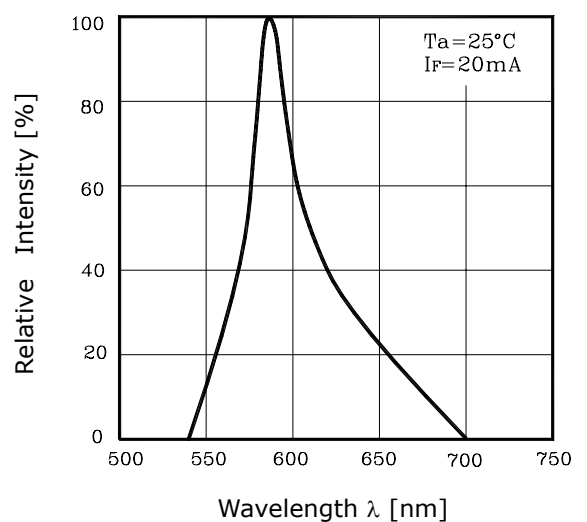
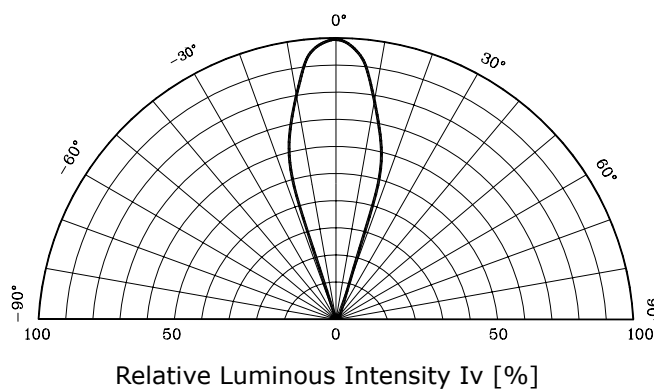


Fig. 5 Radiation Diagram



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